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09/994,475	11/26/2001	Gene Ciancaglini	MAL-002AUS	7235
48102 7590 04/17/2007 NETWORK APPLIANCE/BLAKELY 12400 WILSHIRE BLVD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER KIM, DAVID S	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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# Office Action Summary

Application No.

09/994,475

Applicant(s)

CIANCAGLINI ET AL.

Examiner

David S. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 8-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### **Claim Rejections - 35 USC § 112**

1. Applicant's response to the rejection of **claim 30** in the previous Office Action (mailed on 07 December 2007) is noted and appreciated. Applicant responded by amending the claim. Applicant's amendment overcomes the previous rejection, which is presently withdrawn.

### **Claim Rejections - 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 8-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Modiano et al. ("Design and analysis of an asynchronous WDM local area network using a master/slave scheduler", hereinafter "Modiano") in view of Gehlhaar et al. (U.S. Patent No. 5,892,916, hereinafter "Gehlhaar").

**(claim 8)** Modiano discloses a medium access protocol (MAC) for a WDM LAN (abstract); a scheduler (abstract), a control channel (channel on wavelength c in Figs. 1-2), a data channel (any suitable channel in Fig. 1), and nodes coupled to the control channel and the data channel (hub and terminals in Fig. 1).

Modiano's MAC also comprises a control message transmitting step (p. 901, col. 2, last paragraph, l. 3-4, the scheduler schedules transmission requests and informs OTs with transmission instructions).

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This control message specifies one of the nodes as a source node (when a node receives a transmission assignment, this reception indicates that it is a source node for a transmission, p. 901, col. 2, last paragraph). This control message also specifies another one of the nodes as a destination node (e.g., the assignment for queue 1 in Fig. 5 is a transmission assignment for node 1 to transmit to node 3).

After this transmitting step, the MAC comprises a step of waiting (e.g., in the case of unassigned node 3 in queue 3 in Fig. 5, node 3 waits for the next potential assignment; e.g., it is implied that the hub waits at least one slot before sending another transmission assignment to a particular node, p. 901-902, bridging paragraph, otherwise, the node would switch transmission assignments before completing its first assignment) a predetermined period of time related to the value specified in the first control message (e.g., if node 3 is unassigned for one slot, node 3 would wait the duration of that slot for the next potential assignment, p. 904, col. 1; e.g., the hub would wait at least one slot).

Modiano does not expressly disclose that this control message specifies a value that corresponds to an amount of information that the source node can transmit. However, notice that Modiano's nodes are unslotted and unsynchronized (p. 903, col. 1, last paragraph). Also, notice that all of the timing is controlled by the scheduler (p. 903, col. 1, last paragraph). Such timing considerations include when to start transmitting (p. 901, col. 2 – p. 902, col. 1, bridging paragraph). Similarly, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to include when to end transmitting into the timing considerations. One of ordinary skill in the art would have been motivated to do this so that the transmissions of multiple nodes do not “collide”. That is, the method of Modiano involves each node transmitting within the limitations of a slot. If a transmitting node does not know when to end transmitting, this node's transmissions may overlap, or “collide”, in the next slot with the scheduled transmissions of another node. As Modiano describes slots in terms of amounts of bits (p. 903, col. 2, last paragraph), an obvious way to indicate when to end transmissions would be to provide a transmission limit of bits for the source node, which corresponds to the claim limitation of a value that corresponds to an amount of information that the source node can transmit.

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Modiano does not expressly disclose that the control message is a packet. However, a packet is one of the most common transmission structures for network communications. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to embody the control message in a packet. One of ordinary skill in the art would have been motivated to do this since the nodes already receive communication through packets (p. 904, col. 2, last paragraph). That is, this implies that the nodes already possess infrastructure for receiving communication through packets.

Modiano does not expressly disclose:

polling the plurality of nodes to obtain feedback from the plurality of nodes, said polling comprising

sending a second control packet to each of the plurality of nodes over the control channel, the second control packet specifying the scheduler as the destination node, wherein each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the second control packet.

Regarding the polling limitation, polling a plurality of nodes to obtain feedback from the plurality of nodes is well known in the art, as shown by Gehlhaar (e.g., col. 2, l. 35-57, col. 3, l. 11-12). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include such polling in the method of Modiano. One of ordinary skill in the art would have been motivated to do this since such feedback allows one to manage the resources of the network to ensure optimum performance (Gehlhaar, col. 2, l. 35-38).

Regarding the limitation of “sending a second control packet to each of the nodes over the control channel”, one would implement the polling step above by sending a message (Gehlhaar, col. 3, l. 11-12) to each of the nodes. The nature of such a message is control information, so an obvious variation is to send a control packet. Moreover, it is obvious to send *control* packets over the *control* channel of Modiano.

Regarding the limitation of “the second control packet specifying the scheduler as the destination node”, notice that the scheduler of Modiano serves as a network manager for the network. Gehlhaar teaches that the feedback would go from the network elements to the destination of the network manager

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(Gehlhaar, col. 2, l. 45-49, col. 3, l. 11-12). Accordingly, it obvious for the second control packet to specify the scheduler as the destination node for communications from the network elements to the network manager.

Regarding the limitation of “wherein each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the second control packet”, notice that there are two types of channels in Modiano, the control channel and the data channel. One of ordinary skill in the art would recognize that either channel is suitable for carrying response communications (Gehlhaar, e.g., col. 3, l. 11-12) from the nodes to the scheduler. Thus, it is an obvious variation for each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the second control packet.

**(claim 9)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 further comprising:

receiving the control packet at each of the plurality of nodes in the network (the star in Fig. 1 distributes the control wavelength to all the nodes); and

in response to the source node receiving the control packet, transmitting (p. 901, col. 2, last paragraph) from the source node onto the data channel an amount of information not greater than the amount specified in the control packet (nodes are assigned to transmit an amount corresponding to a slot, e.g., p. 904, col. 2, last paragraph).

**(claim 10)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 wherein in response to the destination node specified in the control packet receiving the control packet, the destination node monitors (Fig. 2, tunable receivers in destination nodes have to tune to the appropriate wavelength to properly receive from the data channel) the data channel for data following the control packet (control information to transmit during a particular transmission slot is received before the start of the transmission slot, p. 903, col. 1, last paragraph, so reception occurs following the control information).

**(claim 11)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 10 wherein the destination node specified in the control packet retrieves the data from the data channel of the network (any suitable channel in Fig. 1).

(claim 12) Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 wherein the amount of information specified in the control packet corresponds to a predetermined number of data packets (p. 904, col. 2, last paragraph).

(claim 13) Modiano in view of Gehlhaar discloses:

The protocol of Claim 9 wherein transmitting the amount of information includes transmitting one or more data packets immediately or after a delay known to both the scheduler and the node (e.g., p. 901-902, bridging paragraph).

(claim 14) Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 wherein in response to the node to which the control packet is addressed receiving the control packet, immediately or after a delay known to both the scheduler and the node transmitting no more bytes than are permitted by the control packet (transmission is limited to a slot, p. 903, col. 1, last paragraph, p. 904, col. 2, last paragraph).

(claim 15) Modiano in view of Gehlhaar does not expressly disclose:

The protocol of Claim 9 wherein receiving the control packet at each of the plurality of nodes in the network includes passively tapping the control channel at each of the plurality of nodes in the network to receive the control packet.

However, note the receiver coupling/tapping shown in the nodes in Fig. 2. Such coupling/tapping is conventionally passive.

(claim 16) Modiano in view of Gehlhaar does not expressly disclose:

The protocol of Claim 8 wherein the **value** in the control packet corresponds to **a number of bytes** the source node can transmit and the predetermined period of time corresponds to the amount of time required for the source node to transmit the **bytes**.

However, limiting transmission is part of the basic functions in a MAC. At the time the invention was made, it would have been obvious to correspond the value in the control packet to a number of bytes. One of ordinary skill in the art would have been motivated to do this to limit the nodes from transmitting more than one slot. That is, transmitting more than one slot could lead to conflicts in transmission

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assignments and reception assignments. Accordingly, the predetermined period of time (duration of a slot) of Modiano would correspond to the time required for the source node to transmit the bytes.

**(claim 17)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 14 further comprising dispatching a second control packet after waiting for the predetermined period of time (e.g., in the case of unassigned node 3 in queue 3 in Fig. 5, note that another assignment message will follow for the next slot, p. 904, col. 1).

**(claim 18)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 17 wherein at least one of a source node (e.g., queue 3 corresponds to node 3 in Fig. 5) and a destination node specified in the second control packet is different than the source node (e.g., queue 2 corresponds to node 2 in Fig. 5) and the destination node (e.g., assignment of destination node 1 for queue 2 in Fig. 2) specified in the first control packet.

**(claim 19)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 wherein the control channel and the data channel are carried by the same fiber (any suitable fiber link in Fig. 1) and wherein the control packet on the control channel is "out-of-band" (separate control wavelength  $c$  in Figs. 1-2) from data on the data channel.

**(claim 20)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 8 wherein transmitting the control packet includes transmitting the control packet from a headend (hub in Fig. 1) of the network.

**(claim 21)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 20 wherein transmitting the control packet from a headend of the network includes the headend dispatching a scheduler allocation message (SAM) (e.g., messages from scheduler in Fig. 1).

**(claim 22)** Modiano in view of Gehlhaar discloses:

The protocol of Claim 21 wherein the SAM specifies a source node address (e.g., designation for transmitting node/queue in Fig. 5), a destination node address (e.g., designation for receiving node in Fig. 5), and at least one of: (a) a number of bytes (simply divide the slot size by the size of a byte) the source



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node may transmit to the destination node; and (b) an amount of time in which the source node may transmit (one slot at a time, e.g., p. 904, col. 2, last paragraph).

**(claim 23)** Claim 23 is an apparatus claim that corresponds largely to the method claim 8. Therefore, the recited limitations in method claim 8 read on the corresponding limitations in apparatus claim 23. Claim 23 also includes limitations absent from claim 8. Modiano discloses some of these limitations:

the optical path having a first end and a second (any suitable ends of the optical paths in Fig. 1);  
the time period corresponding to a data transmission time for a node (one slot amount of time, p. 903, col. 1, last paragraph); and

waiting a period of time corresponding to the allotted data transmission time for node prior to releasing another control message (e.g., it is implied that the hub waits at least one slot amount of time before sending another transmission assignment to a particular node, p. 901-902, bridging paragraph, otherwise, the node would switch transmission assignments before completing its first assignment).

Modiano in view of Gehlhaar does not expressly disclose:

the control message **processor** and

the scheduler timing **processor**, in communication with said control message processor, said scheduler timing processor for causing said control message processor to perform said waiting step above.

However, processors are extremely well known in the art for implementing networks, like the network of Modiano in view of Gehlhaar. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement a control message processor and a scheduler timing processor. One of ordinary skill in the art would have been motivated to do this since computing functions, like the control message function and the scheduler timing function, are conventionally implemented by processors. Accordingly, since the scheduler timing function of Modiano (e.g., p. 903-904, section C) in view of Gehlhaar controls the timing of control communication with the nodes, the scheduler timing processor would be in communication with the control message processor and would control the timing of the control message processor, such as the waiting step above.

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**(claim 24)** Modiano in view of Gehlhaar does not expressly disclose:

the scheduler authorization message (SAM) **processor**.

However, similar to the treatment of claim 23 above, implement such a processor for the SAM function of Modiano in view of Gehlhaar would be obvious.

**(claim 25)** Modiano in view of Gehlhaar discloses:

The network of Claim 23 wherein the control and data channels are separate from each other (separate control wavelength c in Figs. 1-2).

**(claim 26)** Modiano in view of Gehlhaar discloses:

The network of Claim 23 wherein the individual data channels and control channels are distinguished by wavelength (different wavelength for data and control channels in Fig. 1).

**(claim 27)** Modiano in view of Gehlhaar discloses:

The network of claim 25, wherein the control channel is out-of-band from the data channel (separate control wavelength c in Figs. 1-2).

**(claim 28)** Modiano discloses:

A method comprising:

in response to a request (requests on p. 901, col. 2, last paragraph) from one of a plurality of nodes in a local-area optical wavelength division multiplexed (WDM) network (Fig. 1), transmitting a second control packet (p. 901, col. 2, last paragraph, l. 3-4, the scheduler schedules transmission requests and informs OTs with transmission instructions) from a scheduler in the WDM network over a control channel (channel on wavelength c in Fig. 1) of the WDM network.

Modiano does not expressly disclose:

periodically polling a plurality of nodes in a local-area optical wavelength division multiplexed (WDM) network to obtain statistical information on the plurality of nodes, said polling comprising sending a first control packet to each of the plurality of nodes over a control channel, the first control packet specifying the scheduler as the destination node, wherein each of the plurality of nodes sends feedback to the scheduler over a data channel in response to the first control packet; and

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the second control packet specifying a first value corresponding to an amount of information which the one of the plurality of nodes can transmit.

Regarding the control packet limitation, notice the treatment of the corresponding limitation in claim 8 above. The argument applied above is applied here to the corresponding control packet limitation.

Regarding the polling limitation, periodically polling a plurality of nodes to obtain statistical information is well known in the art, as shown by Gehlhaar (col. 2, l. 35-57, col. 3, l. 11-12). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include such polling in the method of Modiano. One of ordinary skill in the art would have been motivated to do this since such statistical information allows one to manage the resources of the network to ensure optimum performance (Gehlhaar, col. 2, l. 35-38).

Regarding the limitation of "sending a first control packet to each of the nodes over a control channel", one would implement the polling step above by sending a message (Gehlhaar, col. 3, l. 11-12) to each of the nodes. The nature of such a message is control information, so an obvious variation is to send a control packet. Moreover, it is obvious to send control packets over the control channel of Modiano.

Regarding the limitation of "the first control packet specifying the scheduler as the destination node", notice that the scheduler of Modiano serves as a network manager for the network. Gehlhaar teaches that the feedback would go from the network elements to the destination of the network manager (Gehlhaar, col. 2, l. 45-49, col. 3, l. 11-12). Accordingly, it obvious for the first control packet to specify the scheduler as the destination node for communications from the network elements to the network manager.

Regarding the limitation of "wherein each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the first control packet", notice that there are two types of channels in Modiano, the control channel and the data channel. One of ordinary skill in the art would recognize that either channel is suitable for carrying response communications (Gehlhaar, e.g., col. 3, l.

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11-12) from the nodes to the scheduler. Thus, it is an obvious variation for each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the first control packet.

**(claim 29)** Modiano in view of Gehlhaar discloses:

The method of claim 28, further comprising:

waiting a predetermined period of time related to the first value specified in the second control packet after transmitting the control packet (see the treatment of this limitation in the treatment of claim 8 above).

**(claim 30)** Modiano in view of Gehlhaar does not expressly disclose:

The method of claim 29, further comprising:

in response to a second request from a second one of the plurality of nodes, transmitting a third control packet from the scheduler over the control channel after waiting the predetermined period of time, the third control packet specifying a second value corresponding to a second amount of information which the second one of the plurality of nodes can transmit, ***wherein the second value differs from the first value.***

This limitation of the second value concerns the amount of information that a node can transmit. However, such a parameter is an obvious one to vary. Greater amounts lead to the benefit of easier transmission of larger files and data streams. Smaller amounts lead to more frequent transmission assignments, which result in more frequent servicing of pending transmission requests (Modiano, queues in Fig. 5). Moreover, Modiano discusses “an average slot size of 10,000 bits” (p. 903, col. 2, last paragraph), which suggests varying slot sizes, or varying amounts of information that a node can transmit. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to employ this second value indicating a differing amount of information that a node(s) can transmit. One of ordinary skill in the art would have been motivated to do this since one would need to differentiate between differing amounts of information that is transmitted by the nodes of Modiano. One generally notes such differentiation through a differing value.

**(claim 31)** Modiano in view of Gehlhaar discloses:

A method comprising:

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scheduling packet transmissions over a control channel (channel on wavelength c in Figs. 1-2) and a data channel (any suitable channel in Fig. 1) using a scheduler in a wavelength division multiplexed (WDM) network (Modiano, abstract), the WDM network comprising the scheduler (Modiano, abstract) and a plurality of nodes (Modiano, hub and terminals in Fig. 1); and

using the scheduler to schedule and provision for feedback from the plurality of nodes to the scheduler (notice that the scheduler of Modiano serves as a network manager for the network, and Gehlhaar teaches that the feedback would go from the network elements to the destination of the network manager (Gehlhaar, col. 2, l. 45-49, col. 3, l. 11-12)).

**(claim 32) Modiano in view of Gehlhaar discloses:**

The method of claim 31, wherein using the scheduler to schedule and provision for feedback from the plurality of nodes to the scheduler comprises:

sending a control packet (notice the treatment of the control packet limitation in claim 8 above) over the control channel (it is obvious to send *control* packets over the *control* channel of Modiano) to each of the plurality of nodes (Gehlhaar, e.g., col. 2, l. 35-57, col. 3, l. 11-12) specifying the scheduler as a destination (Notice that the scheduler of Modiano serves as a network manager for the network, and Gehlhaar teaches that the feedback would go from the network elements to the destination of the network manager (Gehlhaar, col. 2, l. 45-49, col. 3, l. 11-12). Accordingly, it obvious for the second control packet to specify the scheduler as the destination node for communications from the network elements to the network manager); and

receiving the feedback from the plurality of nodes over the data channel as scheduled in the control packet (One of ordinary skill in the art would recognize that either channel is suitable for carrying response communications (Gehlhaar, e.g., col. 3, l. 11-12) from the nodes to the scheduler. Thus, it is an obvious variation for each of the plurality of nodes sends feedback to the scheduler over the data channel in response to the second control packet.).

**Response to Arguments**

5. Applicant's arguments, filed on 01 February 2007, have been fully considered but they are not persuasive. Applicant presents ??? salient points.

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**Regarding the first point**, Applicant states:

“Further, the other cited reference, Gehlhaar (US 5,892,916) fails to teach the above limitation as well. According to Gehlhaar, a network manager *monitors* the usage and traffic levels of the network element and *retrieves* information pertaining to the traffic loading of the particular network elements. The network manager downloads additional configuration information to the network elements to reconfigure the network elements based on the traffic loading. (Gehlhaar, col. 2, ln. 38-57) As such, the network manager in Gehlhaar does not poll the network elements by *sending a control packet to each of the network element specifying a scheduler as the destination*, wherein the network elements *send* feedback to the scheduler over the data channel in response to the control packet” (REMARKS, p. 11-12, bridging paragraph, emphasis Applicant’s, similar on p. 14, 1<sup>st</sup> paragraph).

Examiner respectfully notes that Gehlhaar shows polling (“when the network manager sends a message to a network element, it must wait for a response” in col. 3, l. 11-12). The standing rejections address the limitation of “sending a control packet to each of the network element specifying a scheduler as the destination”. The “response” in col. 3, l. 11-12 implies that the network elements send feedback to the network manager/scheduler of Modiano. Accordingly, Applicant first point is not persuasive.

**Regarding the second point**, Applicant states:

“In addition to, or as an alternative to, the above reason, claim 8 as amended is patentable over Modiano in view of Gehlhaar, Ganz, and Weik because one of ordinary skill in the art would not have been motivated to combine the references as suggested in the Office Action as Gehlhaar teaches away from the invention. Gehlhaar explicitly states that “[I]t is **not practical** for the network manager to spend time establishing synchronous connections with each of the network elements that it wishes to communicate with” (Gehlhaar, col. 2, ln. 60-62). Therefore, in view of the above statement in Gehlhaar, one of ordinary skill in the art would not have been motivated to modify Modiano by adding the feature of polling the OTs by sending a control packet over the control channel to the OTs specifying the scheduler as the destination node nor the OTs sending feedback to the scheduler over the data channel in response to the control packet. Therefore, claim 8 as amended is patentable over Modiano in view of Gehlhaar, Ganz, and Weik” (REMARKS, p. 12, last paragraph, emphasis Applicant’s).

Examiner respectfully notes that the fuller context of Gehlhaar states the following:

“Network management, therefore, is accomplished by communication between the network manager and the network elements. A telecommunications network **may** contain **tens of thousands** of network elements. A network manager, therefore may be interacting with **thousands** of elements at a time. It is not practical for the network manager to spend time establishing synchronous connections with each of the network elements that it wishes to communicate with, **if** it must establish **thousands** of connections to manage the network” (col. 2, l. 55-64).

Notice that Gehlhaar’s statement, cited by Applicant, about how “[I]t is **not practical**...” is a conditional statement, based on the requirement of **thousands** of connections. However, Modiano’s network does

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not fit this condition since Modiano's network does not require this many connections (Modiano, e.g., 21 nodes in Fig. 8). Accordingly, Applicant's second point is not persuasive.

**Summarily**, Applicant's arguments are not persuasive. Accordingly, Examiner respectfully maintains the standing rejections.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth N. Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DSK

  
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